Split Water-Cooled Condensing Unit

Minisplit Air Conditioners

Split Water-Cooled Condensing Unit
7,000-60,000 Btu/h
WTK Series 50 Hz

Human Comfort Solutions

Improved Cash Management

- Factory packaging and testing reduce field labor and installation risk and improve system reliability.
- Phased equipment start-up matches building lease-up.
- Short construction cycles maximize cash flow.
- Requires less sophisticated maintenance than built-up systems.

Tenant Satisfaction

- Enjoy the benefits of individual tenant metering since buildings can often be occupied on a one tenant per unit basis.
- After-hour operational cost savings are tremendous since units can be deactivated when not required.
- Complete HVAC system on each area minimized tenant inconvenience during routine maintenance.

Low First Cost

- Factory packaged controls reduce field labor, installation time, and costs.
- Minimize need and cost for fire dampers and air shafts.
- Large equipment rooms and penthouses are not needed.
- Condenser water is available on each floor for tenant computer systems.

Economical Operation

- Area-by-area system results in energy saving since only air conditioners on areas requiring cooling are needed.
- Especially economical after normal building occupancy hours.
- Annual system energy consumption comparable to central chilled water system but with significant energy consumption reduction during partial occupancy and after-hours.

Space Saving

- Compact in size.
- Unit can be installed in a very limited space.

A New Standard For The Industry

Trane sets new standards for

- Serviceability
- Installability
- Reliability
- Flexibility of application in their commercial air conditioning products.

These products enhance Trane's reputation for quality in air conditioning equipments.

Quality Control

All of Trane products have inspected in assembly line. After completion, the condensing unit has been evacuated, leak tested and holding charged with refrigerant to protect rust and dirt. This is to assure that every parts will work in the right condition and at the highest efficiency.

Figure 1- System Diagram of WTK

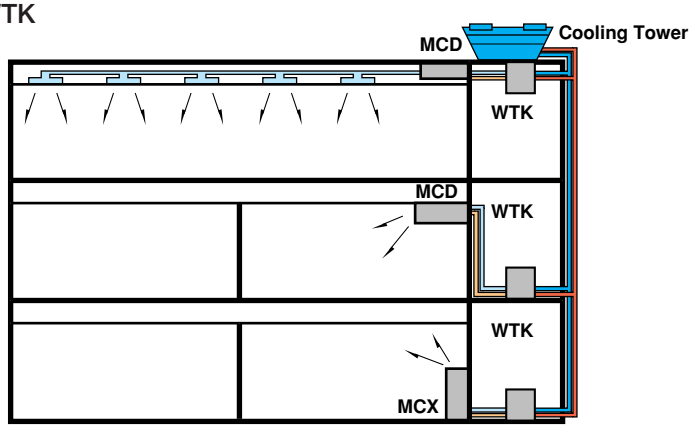


Table 1- General Data

Unit Model		WTK507	WTK509	WTK512	WTK518	WTK524	WTK530	WTK536	WTK048	WTK060
Nominal Capacity	Btu/h	7,000	9,000	12,000	18,000	24,000	30,000	36,000	48,000	60,000
Power supply	V/ph/Hz	220-240/1/50							380-415/3/50	
Compressor Data	Type	Rotary							Scroll	
No. Used		1	1	1	1	1	1	1	1	1
Compressor Speed	rpm	2,840	2,840	2,820	2,840	2,850	2,850	2,850	2,900	2,900
V/ph/Hz		220-240/1/50							380-415/3/50	
RLA/LRA	A	3.5/17.0	4.2/21.0	5.3/29.0	8.5/43.0	10.0/56.0	14.2/85.0	15.8/79.0	10.0/59.0	10.0/74.0
Condenser Data	Type	Tube in tube								
Water Inlet/Outlet Size	in	3/4	3/4	3/4	3/4	3/4	3/4	3/4	7/8	7/8
Outer Tube Diameter	in	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8
Inner Tube Diameter	in	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
Water Coil Operating Pressure	psig	200	200	200	200	200	200	200	200	200
Refrigerant Type		R-22								
Dimension (HxWxD)	mm	400 x 400 x 400				520 x 400 x 500				
Weight	kg	29	29	27	32	43	52	53	63	65

Note: 1.) WTK507 and WTK509 are designed for export market only.
2.) Please see Table 3 for the different liquid line and suction line size of WTK512, WTK518, WTK048, and WTK060 between Thailand and export.
3.) Condenser water pipe size is designed upon condenser water flow rate and may not be the same size as Condenser Water Inlet/Outlet size.

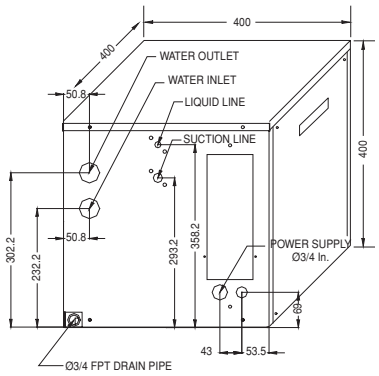
Performance Data

Table 2- System Performance Matrix

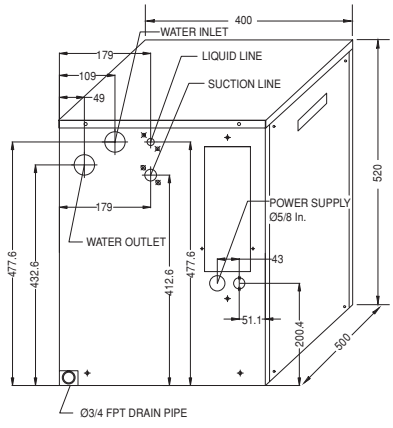
Cond. Unit Model	Air Handler Model	Supply Air cfm	Cooling Cap. Btu/h	Cond. Water GPM	Pressure Drop Ft of water	Fan Coil Unit Dimension - (mm) Height	Width	Depth	Weight (Kg)
WTK512	MCX512GB MCD012AA* MCD512DB	400	12,000	3.3	0.5	627 230 258	1,074 946 946	234 445 494	29 20 20
WTK518	MCX518GB MCD018AA* MCD518DB	600	18,000	5.0	1.4	627 260 258	1,074 946 946	234 445 494	30 23 22
WTK524	MCX524GB MCD024AA* MCD524DB	800	24,000	6.6	2.2	627 260 258	1,324 1,098 946	234 445 531	34 26 24
WTK530	MCX530GB MCD030DB*/EB* MCD530DB	1,000	30,000	8.3	4.3	627 300 258	1,574 1,098 1,098	234 625 531	46 36 26
WTK536	MCX536GB MCD036DB*/EB* MCD536DB	1,200	36,000	9.9	7.0	627 300 258	1,574 1,251 1,251	234 625 531	47 40 29
WTK048	MCX048GB MCD048DB	1,600	48,000	13.2	10.9	627 408	1,824 1,098	234 759	59 49
WTK060	MCX060GB MCD060DB	2,000	60,000	16.5	16.0	627 408	2,074 1,251	234 759	70 55

Notes:
1. At ARI system rating conditions of 80°F-DB/67°F-WB indoor.
2. Condensing water temperature inlet/outlet = 90/100°F.
3. Nominal cfm at high speed fan.
4. MCX—GB, MCD048, and MCD060 are for both Thailand and export market.
   * means MCD used for Thailand market only.

Figure 2- Dimensional Data



WTK507-518



WTK524-060

Table 3- Dimensional Data

Model	Export Market Liquid Line (in)	Export Market Suction Line (in)	Thailand Market Liquid Line (in)	Thailand Market Suction Line (in)
WTK507-509	1/4	3/8	1/4	3/8
WTK512-518	1/4	1/2	3/8	5/8
WTK524-530	3/8	5/8	3/8	5/8
WTK536	3/8	3/4	3/8	3/4
WTK048-060	3/8	1 1/8	1/2	7/8

Mechanical Specifications

Condensing Section

The Trane Split water-Cooled condensing units are designed for commercial and industrial applications. Trane split water-cooled condensing unit can be matched with a variety of air handlers in either convertible, ceiling, or ducted air handlers. These units may be arranged to meet almost any space to make them suitable for every application.

Cabinet

Unit panels are fabricated of heavy-gauge steel and finished with a polyester powder painting and weather-resistant baked enamel finish. Unit surface has been tested 500 hours in salt spray test. Condenser water inlet/outlet and electrical wiring holes are provided. Base drain is a 3/4 -inch female connection.

High Efficiency Compressor

Special low-friction valve ports and rubbing surfaces allow same capacity for less electrical power input-higher EER. Compressor is externally mounted on isolators to isolate the operating sound for quiet operation.

Refrigerant Circuit

Refrigerant piping for condensing unit has been designed and installed to absorb vibration. Packed valves make the quicker and easier installation of refrigerant lines. Easy for refrigerant charging with charging port.

Water-Cooled Condenser

Tube in tube condenser is constructed with copper tubing. Water copper pipe connections are provided for condenser water inlet and outlet.

Options

- Hi-Low pressure cut off (from WTK507 to WTK536)
- 3 minute time delay (for use with MCD)

Fan Coil Section

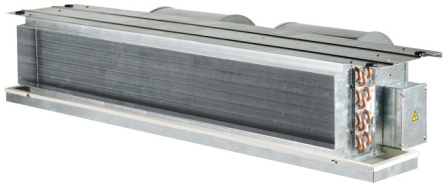
Convertible Air Handler MCX Series

The MCX-GB series is the compact design with 3-convenience installation-floor, low wall, and ceiling types. Fashionable adjustable discharge grille and decorative return air grilles are modern and elegant outlook. Unit panels are internally acoustically insulated with closed cell elastomeric insulator for quiet operation and healthy indoor air quality.

MCX

Ceiling Air Handler

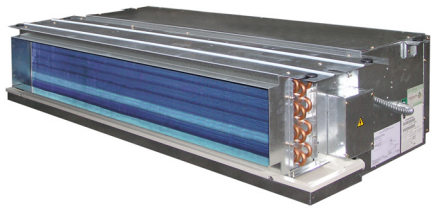
Model MCD-AA and MCD-EB air handler are designed for horizontal concealed ceiling applications, commonly used within the closets of hotels, motels and apartment. Standard features include triple protection drain pan (galvanized steel, polystyrene foam, and plastic) providing maximum insulation and water integrity. Servicing is made simple because the motor-blower section is completely removable from the coil section.



MCD---DB/AA

Ducted Air Handler

Model MCD-DB is the high static version of the model MCD-AA and MCD-EB unit. It utilizes the larger diameter fans operating at low RPM to achieve the increased static pressure requirements needed for limited distribution ducts. The standard unit has a 1-inch supply air duct collar to facilitate field connection of the supply ductwork.



MCD---DB W/Plenum

Literature Order Number:	MS-SLB024-EN
Date:	Jun 2009
Supersedes:	Dec 2008
Stocking Location:	Bangkok, Thailand

Trane
www.trane.com

For more information, contact your local district office

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